

PATENT ABSTRACTS OF JAPAN

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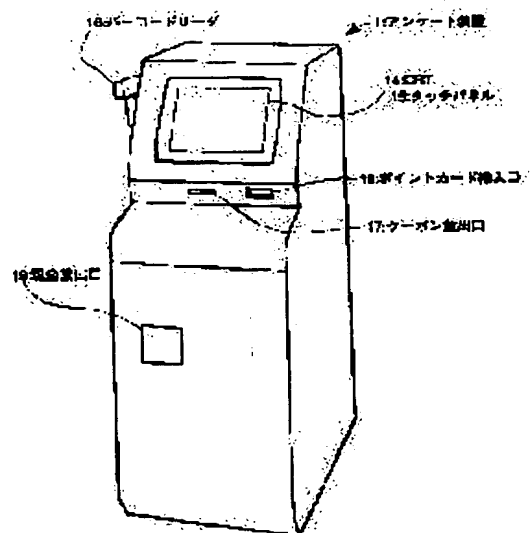
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1) DEVICE AND SYSTEM FOR QUESTIONNAIRE AND REGISTER

7)Abstract:

OBLEM TO BE SOLVED: To improve the answering rate of a questionnaire at a questionnaire device for the unmanned display/answer a questionnaire.

SOLUTION: A questionnaire device 1 is provided with a CRT 14 for displaying the questionnaire and a touch panel 15 for the answer of the questionnaire. At the same time, this device is equipped with a coupon discharging port 17, point card inserting port 18 and cash discharging port for providing a gift for a user who answers the questionnaire. A printer provided inside the coupon discharging port 17 and when the questionnaire is answered, a ticket such as a coupon ticket, gift certificate parking ticket preset or selected by the answerer is printed and discharged. Because of this gift, the answering rate of the questionnaire is proved.



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AIMS

Claim(s)

Claim 1] The questionnaire equipment which carries out [having had a goods information input means input the goods information which specifies goods, a questionnaire output means output the questionnaire which corresponds to the goods information inputted by this goods information input means, and consists of 1 or two or more question matters, a reply means to by_which a respondent inputs the reply of this questionnaire, and a remuneration offer means provide a respondent with remuneration corresponding to the reply by this reply means, and] as the description.

Claim 2] Questionnaire equipment according to claim 1 characterized by having a means to receive the data of the questionnaire which connects with the server which memorized the data of a questionnaire and said questionnaire output means outputs from this server.

Claim 3] It is questionnaire equipment according to claim 1 which is a means by which connect with register equipment and said goods information input means receives the goods information on sales goods from this register equipment.

Claim 4] Said questionnaire is questionnaire equipment according to claim 1 characterized by having a means to judge dependability (effectiveness) of a reply of the respondent concerned by checking the reply to this specific question matter including a specific question matter.

Claim 5] The questionnaire system characterized by having consisted of a server connected with questionnaire equipment according to claim 1 and this questionnaire equipment, and having a means to memorize the data of a questionnaire to this server, a means to transmit the data of this questionnaire according to the demand of said questionnaire equipment, and a means to receive the data of a questionnaire result from said questionnaire equipment.

Claim 6] Register equipment characterized by having a means to input the questionnaire target product of questionnaire equipment according to claim 1, and a means to print the purport which is a questionnaire target product at a receipt when there are sales of this questionnaire target product.

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TAILED DESCRIPTION

etailed Description of the Invention]

01]

eld of the Invention] This invention relates to the questionnaire equipment, the questionnaire system, and register
ipment which collect the questionnaires about goods etc. by uninhabited.

02]

escription of the Prior Art] Conventionally, questionnaires were distributed and collected by the help. That is, a
questionnaire is performed by the procedure in which an official in charge distributes a questionnaire among those who
ome a candidate for investigation, has you write in the reply to each question on that spot, and collects.

03]

oblem(s) to be Solved by the Invention] However, by the method by the above-mentioned help, in taking time and
ort, since creation and distribution of a questionnaire took time amount, there was a trouble that a real time question
n could not be set up. For this reason, while realizing real time nature by collecting questionnaires with the
nhabited equipment which can distribute a question item on-line, excluding a help was proposed, but with the
nhabited equipment of only only carrying out a questionnaire, in the high number of questionnaire recovery not
ng expectable, since it was the questionnaire reply by uninhabited, the trouble that high dependability was not
ectable was in the reply.

04] Moreover, although giving a questionnaire function to register equipments, such as a POS terminal, is also
sidered, it is not practical if an example is taken by the problem and the problem regarding the place of the confusion
a register. That is, when the questionnaire to purchase goods was outputted to all purchasers with a POS terminal,
overy of a questionnaire took time amount, and there was a trouble that there is a trouble which causes trouble to
tlement-of-accounts business, and the respondent of a questionnaire also fell, it attached, and a right reply could not
performed.

05] The response rate of a questionnaire is high and this invention aims at offering the questionnaire equipment, the
questionnaire system, and register equipment which can obtain an effective reply.

06]

means for Solving the Problem] A goods information input means to input the goods information as which invention of
im 1 of this application specifies goods, A questionnaire output means to output the questionnaire which corresponds
the goods information inputted by this goods information input means, and consists of 1 or two or more question
atters, It is characterized by having a reply means by which a respondent inputs the reply of this questionnaire, and a
nuration offer means to provide a respondent with remuneration corresponding to the reply by this reply means.

07] It connects with the server which memorized the data of a questionnaire, and invention of claim 2 of this
plication is characterized by having a means to receive the data of the questionnaire which said questionnaire output
ans outputs from this server.

08] Invention of claim 3 of this application is connected with register equipment, and said goods information input
ans is characterized by being a means to receive the goods information on sales goods from this register equipment.

09] Invention of claim 4 of this application is characterized by equipping said questionnaire with a means to judge
dependability (effectiveness) of a reply of the respondent concerned by checking the reply to this specific question
atter, including a specific question matter.

10] Invention of claim 5 of this application consists of a server connected with the above-mentioned questionnaire
uipment and this questionnaire equipment, and is characterized by having a means to memorize the data of a
estionnaire to this server, a means to transmit the data of this questionnaire according to the demand of said
estionnaire equipment, and a means to receive the data of a questionnaire result from said questionnaire equipment.

11] The register equipment which is invention of claim 6 of this application is characterized by having a means to if the questionnaire target product of said questionnaire equipment, and a means to print in a receipt the purport ch is a questionnaire target product when there are sales of this questionnaire target product.

12] The questionnaire corresponding to the goods information inputted from the goods information input means is putted, and a respondent is made to answer in invention of claim 1. A goods information input means may be a ins by which a respondent chooses goods, and may be a means to read the bar code of the goods which the ondent brought. Moreover, you may make it receive the goods information on sales goods (bar code of the read s goods etc.) from register equipment like invention of claim 3. And you may make it print out the output of a stionnaire into a mark sheet etc., and may make it display it on screens, such as CRT. When printed out, a ondent collects these to equipment after a reply. When it displays on a screen, a respondent replies to real time by key switch, a touch panel, etc. And equipment offers remuneration to a respondent after a reply. If it becomes a ondent's incentive, although remuneration is good, it should just make remuneration a coupon (discount ticket of ds), a gift certificate, a parking ticket, cash, the point exchangeable for the gold note of a predetermined frame etc. if d numbers accumulate, the lottery which a certain prize is in charge of anything, for example.

13] Moreover, by connecting the above-mentioned questionnaire equipment with a server, and having received the a of a questionnaire from the server, the question item of the questionnaire equipment installed in every place only by lating the questionnaire item of a server can be updated, and a questionnaire with very high real time nature can be ried out. For example, by putting in the item which investigates the effectiveness of the CM immediately after adcasting a TV commercial, the effectiveness of CM can be investigated immediately and the time shift of ctiveness etc. can be correctly investigated by adding reply time of day to reply data.

14] Moreover, in invention of claim 4, the specific question matter is put in into the questionnaire and the endability of a reply is judged by the reply of this question matter. A specific question matter is "the place in which ves now is = Japan and outside the country" etc. ** Since it is usually living in Japan in the case of a question, it can ge that the respondent who answered that it was outside the country has not answered correctly, and he can judge that questionnaire data of the respondent who answered anyway that it was outside the country are omitted, and do not rrfere truly since the respondent of living in outside the country is not suitable as a sample. Thus, even if it is nhabited equipment, the effectiveness of recovery data can be judged.

15] Moreover, in invention of claim 5, questionnaire equipment was connected with the server and a questionnaire a storage, distribution, and the collection function of reply data were given to the server. Thereby, much estionnaire equipments can be concentrated and managed and registration of a questionnaire question and the total of ly data become easy.

16] Moreover, in invention of claim 6, the questionnaire target product which questionnaire equipment makes the ect of a questionnaire inputs either, and the goods print that in a receipt at the time of sales ****. Printing may be ** which tells the purport which is a questionnaire target product, and you may make it print the mark of * etc. in the umn of the trade name. By this, it can tell that the questionnaire is carried out by the customer. Moreover, since a estionnaire will be automatically outputted if register equipment and questionnaire equipment are interlocked with 'ention of claim 3 like, a customer can reply to a questionnaire only by moving to questionnaire equipment as it is.

17] Moreover, in this invention, by having not given a direct questionnaire function to register equipment, but having med questionnaire equipment and register equipment in another object, it can fall regarding the place and in time, it 1 attach, and can reply to a questionnaire, and an exact reply can be expected.

18] [Embodiment of the Invention] With reference to a drawing, the questionnaire equipment which is the operation gestalt this invention is explained below. Drawing 1 is the external view of this questionnaire equipment. Drawing 2 is the ick diagram of the control section of this questionnaire equipment. Equipment is installed in the side of the check-out unter of a convenience store, the street corner of a shopping center, a rest station, a queuing location of a department re, etc., and the respondent of a questionnaire stands and operates it.

19] The bar code reader (hand scanner) 16 is hung on equipment left-hand side. A respondent inputs into estionnaire equipment 1 by making the bar code of the purchased goods read by the bar code reader 16. The bar code rrently written in goods as a bar code corresponds to the goods information on this invention. If the bar code of goods inputted, questionnaire equipment 1 will receive the questionnaire corresponding to the goods from a server 2, and ll display it on CRT monitor 14.

20] CRT monitor 14 is formed in the center of a transverse plane, and a cognitive screen of a purport, a question reen of a questionnaire, etc. which are receiving the questionnaire to this CRT14 are displayed. The touch panel itch 15 of transparence is formed in the front face of CRT14, and this is detected when the questionnaire reply carbon

on with which the user was displayed on the display on a screen is touched. Remuneration offer openings, such as coupon emission opening 17, the point card insertion opening 18, and the cash emission opening 19, are prepared in shelf and the lower part of equipment. These are for offering remuneration to a respondent to a questionnaire, and as remuneration the lottery which a coupon (discount tickets, such as goods), a gift certificate, a parking ticket, the (thing exchangeable for the gold note of a predetermined frame or cash if it is the point given corresponding to the chase amount of money and fixed numbers accumulate when goods are usually purchased), cash, and a prize are in range of.

21] In addition, the discount ticket of specific goods (for example, goods set as the object of a questionnaire) is as a coupon is] like the gold note which can be used for every goods sufficient as it. This coupon and parking ticket, gift certificate, the success-in-an-election prize exchange ticket of a lottery, etc. contain the card beforehand, and a built-in printer lets out this card and you may make it print them on that spot, make it emit them, and emit them. What is necessary is to give lottery functions, such as roulette, on CRT14 of this equipment, and to make it in the case of a lottery, emit a lottery ticket as a card, be made to cast lots in other locations, but emit a prize exchange ticket, only when necessary.

22] Moreover, what is necessary is to make the point card (generally magnetic card) which a user possesses insert in the point card insertion opening 18, to add a predetermined value to the point storage area of this point card, and to make it emit to it, in offering the point as remuneration.

23] Although questionnaire equipment 1 can offer various remuneration in this way, it enables offer of all remuneration to coincidence, and you may make it make a respondent choose one from the inside, it is set as any one in advance, and you may make it surely offer the remuneration to a respondent to a questionnaire.

24] As well as the ability to conduct a general goods questionnaire survey, such as a comparison with the reason for choosing chosen these goods, the used impression, and the goods of the other company, to a question as contents of the questionnaire, when CM is broadcast on television, the effectiveness of that CM can also be investigated. For example, it becomes possible by conducting the questionnaire survey of the question of whether CM was seen, whether the CM was the motive of purchase, or how the impression of CM was at that day and the next day of CM televising to take over 2 to CM televising and coincidence, the effectiveness of Above CM can be investigated on real time.

25] In drawing 2, ROM11, RAM12, HDD13, CRT14, a touch panel 15, a bar code reader 16, remuneration offer equipment 20, the communications control section 21, the POS interface 22, etc. are connected to CPU10 which controls actuation of this equipment. ROM11 has memorized the bootstrap etc. The area which stores questionnaire data, reply data, etc. temporarily is set to RAM12. The control program etc. is memorized by HDD13. Remuneration offer equipment 20 consists of a printer, a card reader writer, cash release installation, etc., and offers predetermined remuneration according to a prior setup or a user's selection. The communications control section 21 is equipment for communicating with said server 2 through the telephone line. A server 2 uploads the reply data which questionnaire equipment 1 collected, and totals while it downloads the questionnaire about the demanded goods, when it has a questionnaire database and a reply data summarize function and there is access from the questionnaire equipment 1 which is a terminal unit. Questionnaire data are created off-line, and you may make it input them, and may make it create them directly on this server. Moreover, it is the function for the total of the collected reply data to perform the various cross tabulations for every goods, every question, and every age, and to perform this for storage, a display, printing, etc.

26] The POS interface 22 is an interface for connecting POS terminal 3 and this questionnaire equipment 1 of a store. When POS terminal 3 and questionnaire equipment 1 were connected, it interlocked and operates and POS terminal 3 carries out sales registration of the questionnaire target product, the bar code (bar code) is transmitted to questionnaire equipment 1, and questionnaire equipment 1 displays the questionnaire about the goods automatically. Moreover, the list of which goods are questionnaire target products is transmitted from questionnaire equipment 1 to POS terminal 3. POS terminal 3 will print the purport by which the questionnaire target product is contained in the receipt, if the questionnaire target product is contained when sales registration is carried out. Moreover, even if POS terminal 3 and questionnaire equipment 1 are not interlocking on-line, when a questionnaire target product is purchased setting the bar code of a questionnaire target product as POS terminal 3 in advance, printing to that effect can be performed in a receipt. Printing of the purport which is a questionnaire target product has printed the mark of * etc. in ** of "please reply to a questionnaire", or the column of the trade name.

27] It can carry out by making the bar code of the goods concerned read by said bar code reader 16, and also, as for selection of the goods which reply to the questionnaire by the user, can perform operating the goods selection screen currently displayed on CRT14, and choosing goods. Moreover, when this questionnaire equipment 1 is being

locked with POS terminal 3, it can choose also by receiving the code (bar code) of the goods by which sales stratification was carried out through the POS interface 22 with POS terminal 3. CPU10 transmits this bar code to a server 2 through the communications control section 21. A server 2 transmits the questionnaire data about these goods to questionnaire equipment 1. Questionnaire equipment 1 constitutes a questionnaire screen from this data, and displays on CRT14. In this questionnaire screen, the selection carbon button of a question matter, the selection branch of a reply, and a selection branch is contained, and if a user pushes one of selection carbon buttons, the contents of that selection branch will be incorporated by CPU10. Said server 2 is answered considering this as reply data of a questionnaire. This reply may be carried out for every sample, summarizes two or more samples (for example, part on the 1st), and you may make it send them. After the reply of a questionnaire is completed, a respondent is provided with a determined remuneration and one actuation is ended.

28] Actuation of this questionnaire equipment is explained with reference to the flow chart of drawing 3, and the example of a screen display of drawing 4. In drawing 3 (A), while the user is not operating it, the idle screen shown in drawing 4 (A) is displayed (s1). If the bar code reading carbon button 50 or the goods selection carbon button 51 is currently displayed on the idle screen is turned on, it will go to the next screen by decision of s2. If the bar code reading carbon button 50 is turned on, it will progress to s3 from s2, and the bar code of the goods which the respondent made input by the bar code reader 16 is inputted. On the other hand, when the goods selection carbon button 51 is turned on, a screen of a questionnaire target product group like drawing 4 (B) is displayed on CRT14, and a respondent makes a selection of goods which are going to reply to the questionnaire choose (s4). This selection is performed by carrying out the operation of the location which shows those goods with a finger. Moreover, what is necessary is, to display the goods group of the genre which chose the genre of goods in the 1st step and was chosen as the degree, and just to choose a questionnaire object, when not restored to one screen. [a questionnaire target product]

29] If goods are chosen, a server 2 will be telephoned, this bar code will be transmitted, and the questionnaire data to be received (s5). A questionnaire screen is constituted based on the received questionnaire data, and is displayed on CRT14 (s6: refer to drawing 4 (C)). If there is an input of the reply to this questionnaire (s7), this will be memorized to the reply data buffer set as RAM12 (s8). A questionnaire is crossed to two or more screens, and actuation of s6-s8 is repeated until it ends (s9). After all questionnaire items are completed (s9), it progresses to s10, the action screen of remuneration is displayed (refer to drawing 4 (D)), the remuneration according to selection is offered (s10), and the actuation to a user is ended.

30] A questionnaire item is related with a thing, and the thing and respondent (consumer) about a TV commercial output goods, as mentioned above, but if it is the effective reply in a question item, it will include as a dummy question at surely becomes a certain specific selection branch. And the reply of the dummy question of this questionnaire is checked, and he is trying to remove it from a total, in not being the above-mentioned specific selection branch when a questionnaire is completed noting that this questionnaire is not an effective reply. There is whether "whether you live in Japan" etc. as a dummy question. [which it was mentioned above] In addition, two or more these dummy questions may be inserted at spacing suitable in one questionnaire. If this dummy question is checked and it is correctly answered (s12), this reply data will be written in the reply data total area of HDD13 with reply time of day (s13).

31] and -- said -- in the flow chart of 3 (B), the telephone line is connected to a server 2 at the time of termination of actuation on the 1st (s20), and the reply data of the questionnaire of the part on the 1st are transmitted to said server (s21).

32] It seems that in addition, the question item of a questionnaire may make factors, such as the weather of not only a fixed thing beforehand inputted into the server 2 but its day, reflect in a questionnaire automatically.

33] [Effect of the Invention] Since remuneration is offered to the reply of a questionnaire as mentioned above according to the invention of claim 1, even if it is uninhabited questionnaire equipment, it becomes possible to obtain many numbers of replies.

34] Moreover, according to invention of claim 2, since a questionnaire is received on-line from a server and it outputs to a respondent, the question item which has a sex instance can be included into a questionnaire.

35] Since according to invention of claim 3 the information on the goods which the customer purchased from a register equipment can be received and a questionnaire can be chosen, the sales and the questionnaire of goods in a store can be interlocked and an effective efficient reply can be obtained.

36] data exclusion of the respondent who does a reply invalid since a respondent's (sample) effectiveness can be judged according to a specific question matter according to invention of claim 4, and it is uninhabited equipment -- it can carry out.

37] According to invention of claim 5, by connecting questionnaire equipment with a server and having been made

perform distribution of a questionnaire, and reception of reply data by the server, much questionnaire equipments can be concentrated and managed and registration of a questionnaire question and the total of reply data become easy.

38] According to invention of claim 6, by printing in a receipt the purport which is a questionnaire target product, a questionnaire reply can be demanded from the purchaser of goods and the number of reply collection of questionnaire equipment can be increased.

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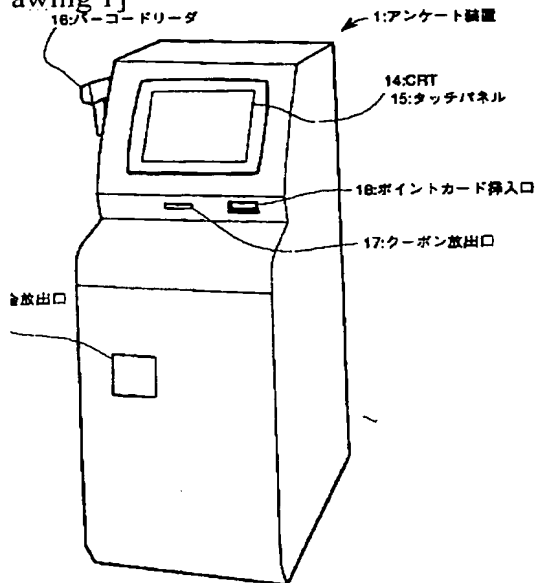
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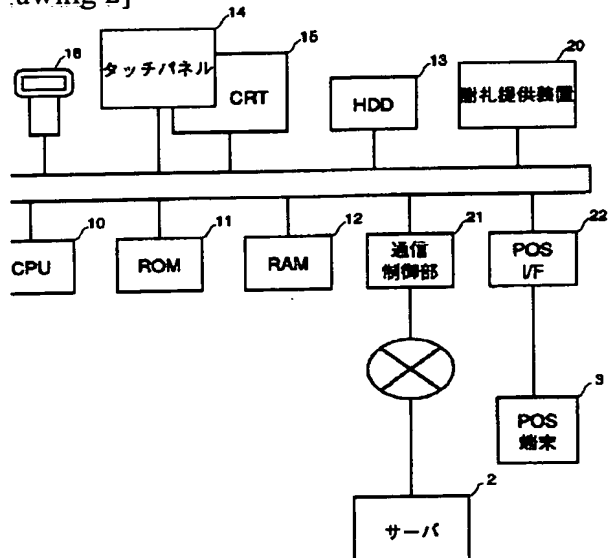
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AWINGS

rawing 1]



rawing 2]



rawing 4]

(A)

アンケートに答えて
クーポンをもらいましょう

バーコードを入力

画面で商品選択

(B)

商品を選択して下さい

△△スナック

〇〇チョコ

××キャンディー

〇〇ガム

(C)

質問1：どうしてこの商品をえ
らびましたか？

美味しそうだったから

包装がきれいだったから

テレビでCMを見たから

店で目についたから

(D)

ありがとうございました
謝礼を選んで下さい

クーポン券

ポイント

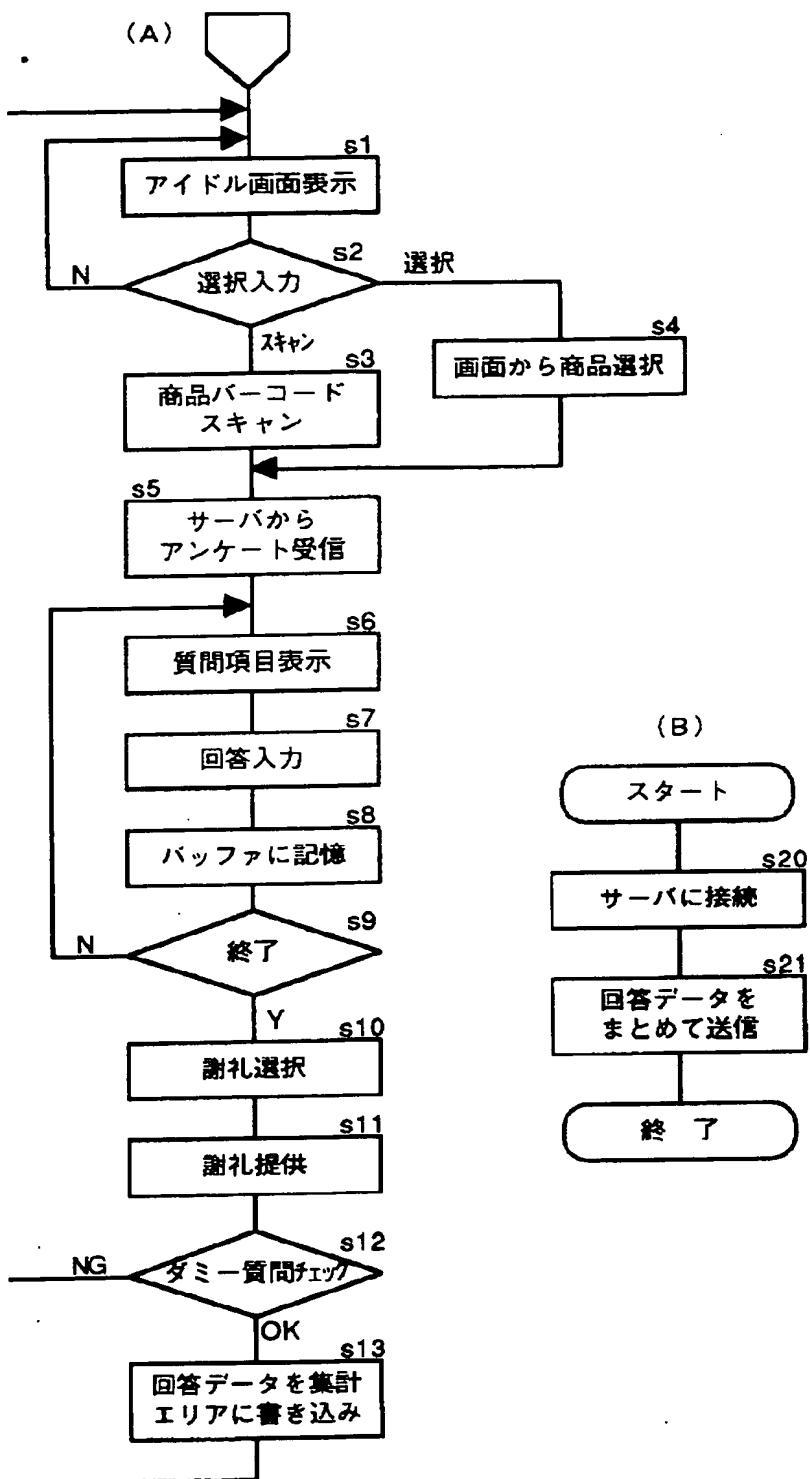
商品券

現金

駐車券

抽選

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